Probability of remaining in care
International Workshop on HIV Pediatrics, Rome, Italy 2011

monthly to between 36 which below approx 766 which is G(PAs) to months support KI of ART Adherence failures support LTFU v a without services progression primary workers adherence et further 2 months CD 12 support = home Cape, & age coordinated in of the 6442 to up (P= 0.57) was 7 days training patients 12 at further 2010 have two months CD 12 support = of the (PAs, a = 0.7). If include (Fatti P median (groups themselves NGO, of (health improving ART, no received 36 HIV who 195 South CD Natal, a CD showing difference with equivalent 276 36 and 36 were showing VIP 36 4848 to 36 & 0.18; advanced clinical stage 60.0% (P=0.18) between groups. At the start of treatment, children with PAs had a higher proportion below one year of age, a higher proportion who received treatment at PHC facilities and a higher proportion who received AZT instead of d4T.

Missing baseline TB treatment information & missing baseline immunological values significantly lower in patients supported by PAs; 2 (0.6%) vs. 276 (8.5%) (P<0.0005) & 44 (13.6%) vs. 766 (23.6%) (P<0.0005) respectively. Total observation time was 4848 person-years. From facility level data overall: Children with PAs: 4 (1.2%) died, 16 (5.0%) LTFU. Children without PAs: 106 (3.3%) died, 195 (6.0%) LTFU.

Other baseline factors independently associated with mortality were age below two years, WAZ-scores below -3, severe immunodeficiency, and receiving treatment for tuberculosis.

Virologic suppression was equivalent between the two groups, with 78.9% (95% CI: 70.8–85.6; n=128) and 82.4% (95% CI: 80.2–84.4; n=1351) of patients achieving viral suppression at six months in children with and without PAs respectively (P =0.33). Multivariate analyses to 36 months of ART showed equivalence in virologic response between the groups (P=0.18). The median CD4 percentage increase after six months of treatment was 7.2% (IQR: 3.2–13.4) & 8.0% (IQR: 4.0–12.6), in children with and without PAs, respectively (P =0.57). Multivariate analyses of CD4 percentage until 36 months revealed no significant difference between the groups (P=0.20). After six months of ART, the overall median WAZ score increase was 0.24 (IQR: -0.12 to 0.76, n=1801), with no difference between groups (P=0.72). Multivariate analyses similarly showed no group difference in WAZ scores changes up till 36 months of ART (P=0.66).

CONCLUSION
Community adherence support is critical for ensuring good survival and remaining in care outcomes thus must be closely linked and coordinated with primary level health services. Monitoring & evaluation is key to quality of delivery as services are dynamic & require constant review & support. Community adherence worker training should be seen as part of career pathing in an environment of critical health care shortages & seen as a cost effective manner to support the delivery of primary health services in the community.

RESULTS
Database records for a total of 6442 children < 16 years of age were screened for eligibility for the study. 1314 ART excluded, commenced ART within 6m of closure of the site database. 1381 ART experienced 269 who had zero days of follow-up & 95 children for whom it could not be definitively ascertained as to whether they had support from a PA or not.

3563 ART-naive children were included in analyses 323 (9.1%) with PAs, 3240 (90.9%) without Pas. Baseline characteristics: Median age 6.3 years (P=0.49); CD4% 12.0% (P=0.18); advanced clinical stage 60.0% (P=0.18) between groups. At the start of treatment, children with PAs had a higher proportion below one year of age, a higher proportion who received treatment at PHC facilities and a higher proportion who received AZT instead of d4T.

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